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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/368,572	08/05/1999	TOSHIHARU OHBA	OHBA=1A	5695

1444 7590 01/14/2002

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EXAMINER

CHUNDURU, SURYAPRABHA

ART UNIT	PAPER NUMBER
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1656

DATE MAILED: 01/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/368,572

Applicant(s)

OHBA ET AL.

Examiner

Suryaprabha Chunduru

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicants' response to the office action (Paper No. 8) filed on November 21, 2001 has been entered.

Response to Arguments

2. Applicant's response to the office action (Paper No.8) is fully considered and deemed persuasive in part.

3. The rejection made under 35 U.S.C. 112 second paragraph in the previous office action, is withdrawn herein in view of the applicants' amendment (Paper No.8).

4. The rejection made under 35 U.S.C. 102(e) in the previous office action is withdrawn herein in view of the applicants' amendment and arguments (Paper No.8).

New Grounds of Rejection Necessitated by Amendment

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3-6 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a plant promoter nucleotide sequences (SEQ ID Nos. 1-8) of endo xyloglucan transferase, does not reasonably provide enablement for any nucleotide sequence hybridizable to the said SEQ ID Nos 1-8. The specification does not enable any person skilled

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in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The claims are broadly drawn to many millions of hybridizable fragments of said promoter nucleotide sequences. The specification solely teaches the use of the said nucleotide sequences in characterizing the promoter region, and provides absolutely no teaching or suggestion regarding any specific hybridizable fragment(s), nor are any specific binding site or methodologies presented which would teach an ordinary practitioner which fragment containing promoter activity would function as the hybridizable sequence to the target. There are no actual working examples of any hybridizable sequences in the specification. The prior art supports the unpredictability of the broad claims. Nishitani et al. (USPN. 5,516,694) states "methods of controlling the expression of endo xyloglucan transferase are not particularly restricted. For example, it can be achieved by introducing an antisense DNA or an antisense RNA of a gene coding for endo xyloglucan transferase into a plant. As the antisense DNA of a gene to be introduced, for example, an antisense DNA of a gene coding for endo xyloglucan transferase or part of the same can be used" (see column 12, lines 8-15). Thus, even a fragment or part of sequence encoding the gene endo xyloglucan is sufficient to necessarily require a change in controlling the morphology of the plant in which the DNA is introduced. While the skill in the art is high, it is highly unpredictable which portion of the nucleotide sequence containing promoter activity will function to achieve binding (hybridizable), which will further function to positively affect in controlling the expression of promoter activity and which of these many millions of hybridizable sequences will function, to control morphology of a plant. This unpredictability is buttressed by the prior art where even the presence of a portion of the sequence does ensure

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functionality. It would require extensive experimentation involving hybridization assays, development and testing portions of sequences to determine whether any particular sequence containing region functioned as required by the claims. Therefore, in view of the breadth of the claims, the absence of guidance provided by the specification, the absence of teaching in the prior art, the absence of any working examples, the unpredictability of the art and the large quantity of experimentation necessary, it is concluded that undue experimentation is required to make and use the invention as broadly claimed.

No claims are allowable.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 703-305-1004. The examiner can normally be reached on 8.30A.M. - 4.30P.M, Mon - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on 703-308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0294 for regular communications and - for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Suryaprabha Chunduru
January 9, 2002



**JEFFREY FREDMAN
PRIMARY EXAMINER**